

**Pro-Vision Academy Charter School**  
**High School Science Distance Learning Plan**

**High School Science**  
**Distance Learning Plan**  
**Week of April 6 - 10, 2020**

**Biology Activities**  
**(Suggested: 45 minutes of off-line activities)**

TEKS B.4C

**Monday**

What makes a viral infection different than a bacterial infection?

Add to your notebook Bacteria and Viruses notes. You need these notes for your weekly lessons. Complete the handout Viruses and Bacteria Packet.

**Tuesday**

Read and Complete the Handout the "Modern Day Plaque: AIDS"  
Look at the Powerpoint "Immune System"

**Wednesday**

Read and complete the Bacteria and Viruses Review Packet.

**Thursday**

Complete the Life Cycles of Viruses and the Bacteria and Viruses Worksheet.

**Friday**

Catch up any missing assignments from last and this week.

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**Chemistry Activities**  
**(Suggested: 45 minutes of off-line activities)**

**TEKS: C.10A C10E**

**Monday**

Understand the types of mixtures.  
Introduce the types of mixtures and what differentiates them.

Watch the power point & Video

<https://www.stjoes.org/ourpages/auto/2014/9/5/49159539/Chapter%202%20Section%202%20Mixtures.pdf>

Identify the 3 main types of mixtures and give an example of each.

**Tuesday**

Learn about the factors affecting the rate of dissolving.

Rates of Dissolving Video

[https://www.youtube.com/watch?v=qL5-lcc\\_TfY](https://www.youtube.com/watch?v=qL5-lcc_TfY)

Identify one other way to increase the rate of dissolving

**Wednesday**

Learn about the composition, parts, and types of solutions.

Explain solvents and solutes.

Explain the types of solutions and their formation methodology.

Identify the solute and solvent of given solutions or mixtures.

**Thursday**

Determine the solute and solvent in a lab setting.

Solutions Video on Crash Course.

<https://www.youtube.com/watch?v=9h2f1Bjr0p4>

Explain solvents and solutes.

Explain the types of solutions and their formation methodology.

Determine what type of mixture each substance is.

**Friday**

Review types of mixtures and solutions.

Create a flowchart to determine the type of mixture or solution.

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Anatomy & Physiology

**(Suggested: 90 minutes of off-line activities)**

**Monday**

Create a brochure for the axial and appendicular skeleton. Include in your brochure characteristics of the appendicular and axial skeleton, including types of bones (flat, short, irregular, long) and how many bones are in each.

**Tuesday**

Create a chart classifying the different types of bones. Chart should include the different types of bones in the body and the locations of the various types of bones in the body. Ex: (**Flat Bones**-Skull, Ribs & Sternum).

**Wednesday**

Bones surfaces may have a variety of projections, bumps and depressions. Create a chart classifying the various bone surface structures. Chart should include the name of the bone surface structures and descriptions.

**Thursday**

Without joints the body could not move, please create a chart classifying the various types of synovial joints in the body. Chart should include the type of synovial joint, the type of movement that it makes, and examples. (**Pivot Joints** - Pivot joints allow rotation example of pivot joints - neck and forearm)

**Friday**

Create a Venn diagram detailing the characteristics of osteoarthritis and rheumatoid arthritis. Chart should include how both conditions are diagnosed, and how both conditions affect the body.

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**Physics**  
**(Suggested: 90 minutes of off-line activities)**

**Monday**

Create a graphic organizer including, but not limited to - concept map, Venn diagram, flowchart, bubble map - of the different types of motion.

**Tuesday**

Create a brochure of Newton's 3 laws of motion and the Law of universal gravitation. Include image and description of each of the laws of motion as well as the law of universal gravitation.

**Wednesday**

Create a 10-most wanted information sheets for 10 of the different sources of energy used in the world to generate power. Make sure to describe the reasons why they made the list in each form to get credit. Also include an image (can be hand-drawn).

**Thursday**

Using the simulation below, design an experiment to describe the relationship between period and mass of pendulum bob, between period and release angle, between period and length of string, and between period and gravity. Record data for at least 6 trials in a data table for each variable under investigation.

<https://phet.colorado.edu/en/simulation/pendulum-lab>

**Friday**

Be prepared to discuss your investigations with your teacher when you return to class. Create your presentation in PowerPoint, Word, or handwritten.